

# CENTENARY EDUCATIONAL CONSULT

## P.L.E PREPARATION - 2024

### PRIMARY SEVEN MATHEMATICS



*Time Allowed: 2 hours 30 minutes*

Index No:

Random No.	Personal No.

**Candidate's Name:**.....

**School Name:** .....

**School Emis No:**.....

**Candidate's Signature:**.....

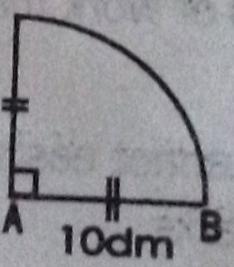
**Read the following instructions carefully:**

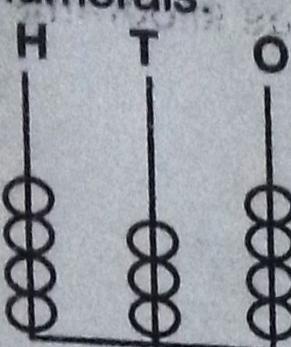
1. Section A has **20** questions (**40 marks**)
  2. Section B has **12** question (**60 marks**)
- Attempt **ALL** questions.
- All answers to both sections **A** and **B** must be written in the spaces provided.
3. All answers **MUST** be written using **blue** or **black** ball – point pen or **ink**. Diagrams should be drawn in **pencil**.
  4. Unnecessary **changes** of work may lead to loss of marks.
  5. Any handwriting that cannot easily be read may lead to **loss** of marks.
  6. Do not fill anything in the boxes indicated "**For examiner's use only**".

#### FOR EXAMINERS' USE ONLY

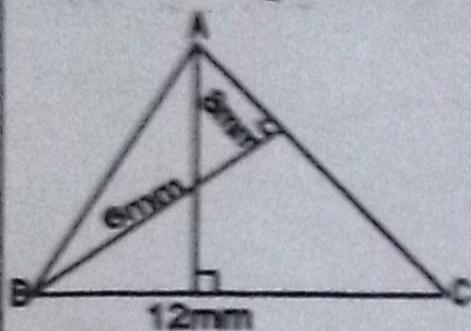
Qn. No.	MARKS	EXR'S NO.
1 – 10		
11 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
<b>TOTAL</b>		

**SECTION A: (40 Marks)**

1. Workout: $105 \div 5$ .	2. Describe the shaded region on the venn diagram below.
3. Expand 34.79 using values.	4. The cost of 5 shirts is sh.27, 000. How many shirts will Daddy buy if he has sh.16, 200?
5. Find the next numbers in the sequence below. 8, -6, -4, -2, _____, _____	6. Change 2020 hours to a 12 hour clock.
7. Find the square root of $11\frac{1}{9}$ .	8. Find the length of curve AB below. ( $\pi = 3.14$ ) 

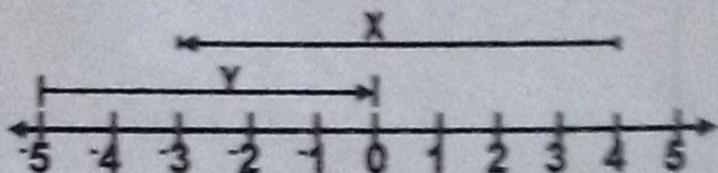
9.	<p>Write the number shown on the abacus below in Roman numerals.</p> 	10.	<p>Using a ruler, a pair of compasses and a pencil, construct an angle of <math>135^\circ</math>.</p>
11.	<p>In a bag, there are <b>8 Red pens</b> and <b>12 Blue pens</b>. If a candidate is selected to pick a pen at random, find the probability that a pen picked is <b>Blue</b>.</p>	12.	<p>Tom was given <math>\frac{3}{4}</math> of sugarcane. He ate <math>\frac{1}{3}</math> of it. What fraction did he remain with?</p>
13.	<p>A regular polygon has <b>12 right angles</b>, Name the polygon.</p>	14.	<p>A mathematics test ended at <b>12:20p.m.</b> If it lasted for <b><math>2\frac{1}{4}</math> hours</b>. At what time did it start?</p>
15.	<p>If  stands for <b>15 seedlings</b>, how many seedlings are represented by </p>	16.	<p>Solve: <math>4n + 4 - 2(n + 4) = 6</math>.</p>

17. Find the length of line AC below.



18. Express 750gms as kilograms.

19. Write the integers represented by letters X and Y below.



20. Write number whose standard form is shown as  $9.6 \times 10^{-3}$ .

### SECTION B (60 Marks)

21. In a class,  $\frac{1}{3}y$  pupils like both types of food,  $(y + 14)$  like Rice only while  $(y + 6)$  like neither of the two foods.

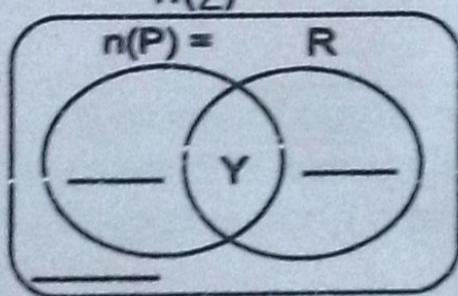
(i) Complete the venn diagram below.

$$n(\Sigma)$$

(ii) If  $n(P \cap R) = 69$ , find the value of Y.

(2marks)

(2marks)



(iii) How many pupils are in that class?

(1mark)

22.

The average of four consecutive even numbers is 15,

(i) Find the numbers.

(3marks)

(ii) What is the product of the first and last number?

(2marks)

23.

(a) Find the unknown base  $n$  if  $24_n = 14_{\text{ten}}$ .

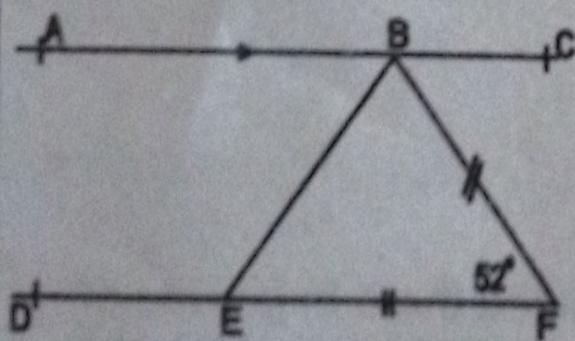
(2marks)

(b) A parent bought books for his children. He grouped them in groups of fives and 3 books remained. When grouped in groups of sixes, 4 books remained. How many books did the parent buy?

(3marks)

24. In a certain school, the ratio of girls to boys is **3:2** respectively. If there are **180 less** boys than girls.
- (a) Find the total number of pupils in that school? (2marks)
- (b) If 60% of the girls are in lower primary and  $\frac{4}{9}$  of the boys are in upper primary, how many pupils are in lower primary altogether? (4marks)

25. In the figure below, line AC is parallel to line DF, line BF = BE. Study it and answer the questions that follow.



Find size of angle; (i) EBC

(3marks)

(ii) DEB

(2marks)

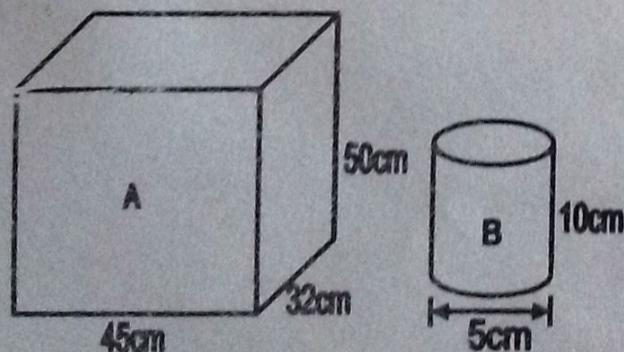
26. A cyclist left Busia at 8:30a.m and reached Bugiri at 10:00a.m riding at 70km/h. He made a stopover at Bugiri for half an hour and thereafter continued to Malaba riding at a speed of 60km/h for 1 hour and 45minutes.

(a) How far is Malaba from Busia?

(3marks)

(b) Calculate the average speed of the cyclist for the whole journey. (3marks)

27. Mukisa was given a task of packing cylindrical nido-tins of size B to big box A shown below.



(a) Calculate the total number of nido-tins that can fill the big box. (2marks)

(b) Workout the volume of space left.

(3marks)

28. During a Mathematics contest, 4 points were awarded for every correct answer and 2 points deducted for every wrong answer given. If a candidate gave 10 wrong answers and obtained 140points, how many questions were asked altogether? (4marks)
29. A shopkeeper bought a dozen of glasses at sh.1500 each. During transportation, some glasses got broken and she sold the remaining glasses at sh.2200 making a profit of sh.4000. How many glasses got broken? (5marks)

30. Kitchen is 50m west of the Main house and the Toilet is 70m from the Main house on a bearing of  $150^{\circ}$ .  
(a) Draw a sketch diagram to show the position of the three places. (1mark)

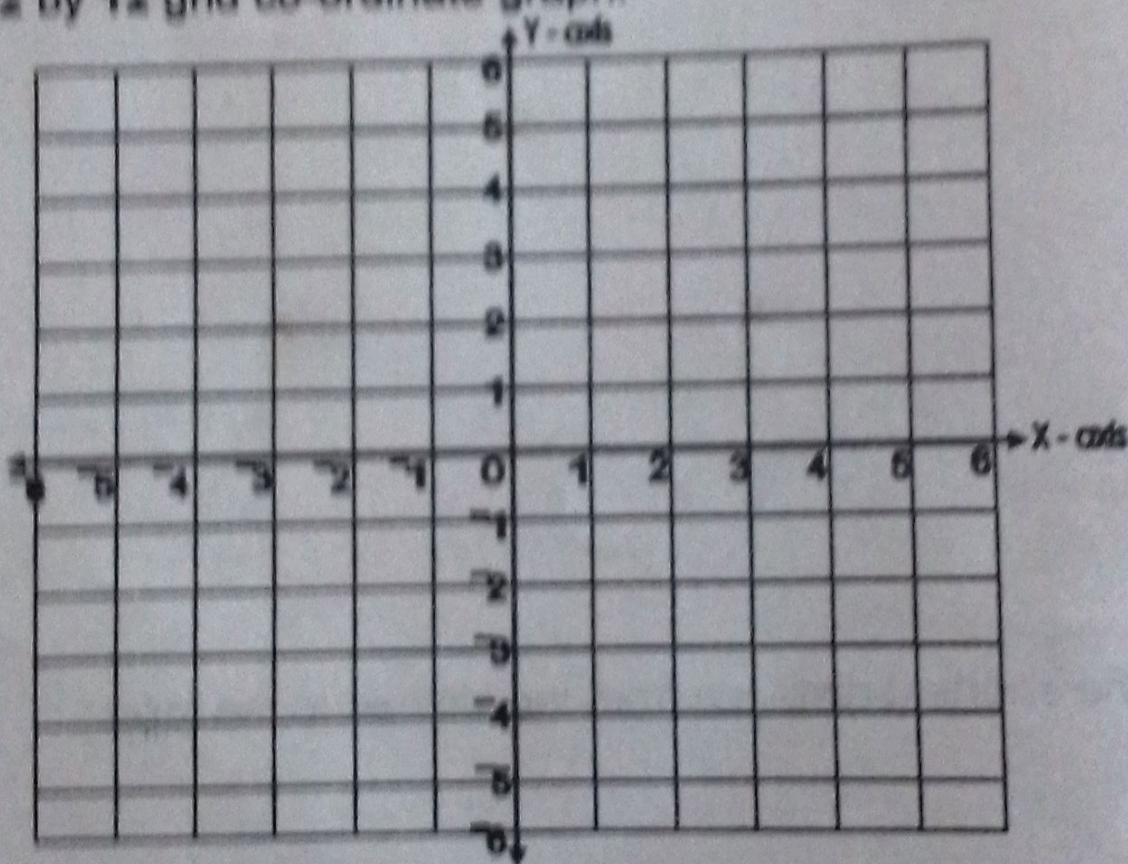
(b) Using a scale of 1cm representing 10m, draw an accurate diagram showing the three places. (3marks)

(c) Find the shortest distance from the kitchen to the toilet. (1mark)

34. (a) Namataka is 9 years younger than Nabende. If their total age is 21 years, how old is each? (5marks)

- (b) After how many years will Nabende be twice as old as Namataka? (2marks)

35. Below is 12 by 12 grid co-ordinate graph.



- (a) Plot the points A(-3,2), B(0,5), C(3, 2) and D(0, -4). (4marks)  
(b) Name the figure formed. (1mark)

**THE END**